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INTERNATIONAL TRADE AND ENVIRONMENTAL PROTECTION: REVISITING HARDIN'S "TRAGEDY OF THE COMMONS"

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Twenty-eight years after the emergence of the World Trade Organisation (WTO) regime, the trade-environmental protection relationship seems to have achieved some harmonisation from an initial chequered one, though not without some forms of lopsided balancing of the variables. This work explores the relationship between international trade and the environment, revealing whether the competing values are balanced. The methodology adopted is doctrinal, with a comparative and analytical approach involving desk and library research. The work is bifurcated into six parts, commencing with an introduction in the first: the second flesh out international environmental agreements relevant to the trade-environment interaction. The third part examines principles of international environmental law. The paper reflects unilateral trade measures in the fourth part. The fifth part takes stock of WTO jurisprudence. While considerable efforts have been made to mainstream environmental protection into trade objectives through the WTO jurisprudence, there remain some forms of market failures, making the trade-environment relationship lopsided, with inadequate attention given to the environment, which brings to fore the need to revisit David Hunter's metaphoric invisible elbow destroying the common goods created by an invisible hand.

Keywords: Biodiversity; Environmental protection; International trade; Climate change; International environmental law; World Trade Organisation Laws; International environmental agreements

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Open Access

**International Trade and Environmental Protection:
Revisiting Hardin's "Tragedy of the Commons"**

1. INTRODUCTION

Hunter et al. (2022), through their concept of "ecological economics", described the trade-environment relationship with many metaphors, one of which is Hardin's "Tragedy of the Commons". The gist of this analogy is that the interaction between trade and the environment rendered the latter degraded significantly in the absence of laws governing their interface.[1] Twenty-eight years after the emergence of the World Trade Organisation (WTO) regime[2], the trade-environmental protection relationship (the focus of this work) seems to have achieved some degree of harmonisation[3] from an initial chequered and loggerheaded one,[4] though not without some forms of lopsided balancing[5] of the variables that predictably favours some interests over others in the manner described in the "tragedy of the commons."[6] This work aims to explore the relationship between international trade and the environment through community lenses of the WTO regime and international environmental laws and in the process reveal whether the competing values are balanced or not.

2. INTERNATIONAL ENVIRONMENTAL AGREEMENTS

Though fragmentation is an existential challenge in international law[7], the comparative marginal[8] and fragmented nature of international environmental law[9] works hardship in identifying norms, rights, duties and obligations[10] at stake in the field. This is unlike other areas of law with a harmonised legal system[11]. A mention of International Environmental Law

1 David Hunter, James Salzman, and Durwood Zaelke, 'International Environmental Law and Policy' (6th edn, Foundation Press, 2022) 98–100.

2 The entire package making up the WTO system known as the Final Act, which includes the Agreement establishing the WTO, the General Agreement on Tariffs and Trade 1994, The General Agreement on Trade in Service, The Agreement on Trade-Related Aspects of Intellectual Property Rights, The Agreement on Technical Barriers to Trade, The Agreement on Sanitary and Phytosanitary Measures, and the Understanding on Rules and Procedures Governing the Settlement of Disputes were opened for signature at Marakesh, Morocco, on 15th April 1994 and entered into force on 1 January 1995

3 Alan Boyle and Catherine Redgwell, 'Birnie, Boyle & Redgwell's International Law and the Environment' (4th edn, Oxford University Press 2021) 810.

4 Harro Van Asset, 'Trade' in Lavanya Rajamani and Jacqueline Peel (eds), *The Oxford Handbook of International Environmental Law* (2nd edn, Oxford University Press 2021) 751.

5 Ibid 766.

6 David Hunter, James Salzman, and Durwood Zaelke (n 1).

7 Dean Spielmann, 'Fragmentation Or partnership? The Reception of ICJ Case-Law by the European Court of Human Rights' in Mads Andenas and Eirik Bjorge (eds), *A Farewell to Fragmentation* (1st edn, Cambridge University Press 2015) 173, <https://www.cambridge.org/core/product/identifier/9781139979498%23CT-bp-7/type/book_part> accessed 8 December 2022.

8 Elizabeth Fisher, 'Environmental Law as "Hot" Law' (2013) 25 Journal of Environmental Law 347, 349.

9 Alan Boyle and Catherine Redgwell (n 3) 107.

10 Fisher (n 9) 348.

11 Examples include the Law of the Sea and the WTO regime. Alan Boyle and Catherine Redgwell (n 3) 108.

is thus an invocation of different bilateral and multilateral treaties.[12] This part revisits these treaties in two rubrics: the first takes stocks of treaties dealing with biodiversity, while the second explores those on climate change.

2.1 Biodiversity Treaties and Trade

Trade remains one of the greatest drivers of biodiversity loss; illustratively, it has been reported that while internationally traded species such as birds are at risk of perpetual extinction, mammals and amphibians remain endangered due to human use.[13] Rockstrom et al. (2018)[14] not only pegged the rate of species extinction due to "human activities"[15] to be 100 to 1000 times higher than expected but also warned that such skyrocketing increase in biodiversity loss comes with rife consequences on the functionality of the earth, ultimately leading to ecosystem resilience attrition[16].

The preceding facts, among others[17], reinforced the need to conserve biodiversity through treaty obligations. The first port of call will be the 1992 Convention on Biodiversity (CBD) and its two protocols[18]. The Convention on International Trade in Endangered Species (CITES)[19] should be mentioned. This list of treaties is not exhaustive, as there exist other treaties, soft laws and mechanisms within the ambit of this discussion.[20]

The CBD is animating for taking an ecocentric or habitat-based approach that appreciates both direct and indirect drivers of biodiversity loss.[21] Hence, its scope includes the whole gamut of the ecosystem[22]. The CBD thus opened the floodgate for international regulation and protection

[12] David Hunter, James Salzman, and Durwood Zaelke (n 1) 413.
[13] Secretariat of the Convention on Biological Diversity, 'Global Biodiversity Outlook 5' (2020) 49.
[14] Johan Rockstrom and et al, 'A Safe Operating Space for Humanity' *Nature* (Macmillian Publishers Limited, 2009) 474.
[15] Though the authors did not specifically mention 'trade' as a reason for biodiversity loss, their employment of concepts such as human activities, land use, conversion of the natural ecosystem into agriculture or urban areas and introduction of new species into land and freshwater environments could, however, be understood to mean commercial or trade phenomenon that affords humans the platform to derive market or trade benefits from the environment or biodiversity. Ibid. Sands et al. added the conversion of forests to oil palm plantations, among others for biofuels to the list. Philippe Sands and Jacqueline Peel, 'Principles of International Environmental Law', (4th edn, Cambridge University Press 2018) 385.
[16] Johan Rockstrom and et al (n 15).
[17] Sands et al., for instance, developed a trinity reason for biodiversity conservation; (1) Provision of actual and potential sources of biological resources, (2) Maintenance of the biosphere, otherwise known as ecosystem service and (3) Ethical, intrinsic, aesthetic and cultural considerations. Philippe Sands and others (n 16).
[18] The 2000 Cartagena Protocol on Biosafety (The Cartagena Protocol) and the 2010 Nagoya Protocol on Access to Genetic Resources and Benefit-Sharing (The Nagoya Protocol)
[19] The Convention on International Trade in Endangered Species of Fauna and Flora
[20] A mention will include the Bonn Convention on Migratory Species, the Ramsar Convention on Wetlands of International Importance, the World Heritage Convention, the International Treaty on Plant Genetic Resources for Food and Agriculture, the International Plant Protection Convention, the 1972 Stockholm Declaration, the 1982 World Charter for Nature, Agenda 21, the 1980 IUCN World Conservation Strategy, and the 1984 Action Plan for Biosphere Reserve.
[21] Philippe Sands and others (n 16) 387.
[22] David Hunter, James Salzman, and Durwood Zaelke (n 1) 998.

of non-migratory species that were hitherto limited to national regulation due to state sovereignty, just as it closes the North-South debate about the treatment of biological diversity as a "Common heritage of humankind" by viewing same as "common concern of humankind"; a term that accommodates both Global North's and South's concerns of conservation and benefit sharing of biodiversity resources.[23] Its innovative introduction of concepts such as biodiversity, genetic resources and biotechnology, benefit sharing, ecosystem, and traditional knowledge epitomised its progressive nature.[24]

The CBD is, however, bedevilled with the challenge of being a framework with weak obligations that can only bark and not bite.[25] This is reflected in its employment of broad concepts that elude clarity.[26] A case in point here is its employment of the term; "common concern of humankind" to replace "common heritage of humankind", which, though settled the North-South debate, potentially creates a weaker obligation on both Northern and Southern states to conserve biodiversity.[27] The CBD, in this manner, has not only turned out to be a sword and a shield in the conservation crises but has also earned the reputation of a "soft law"[28] with uncertain obligations that have been said to reinforce its lack of prioritisation of objectives.[29]

The implication of the preceding is that the implementation of the CBD is subject to the discretion of political actors.[30] Hence, the introduction of its two protocols, the Cartagena and Nagoya Protocols, with stronger normative obligations[31], was purporting to be the game changer. This did not, however, turn out to be the case as the dispute enforcement mechanism of the CBD remained uninvoked[32], leaving most of its provisions judicially unappreciated.

In short, the United States (US), which is often a party to most conservation disputes[33], is not subject to the CBD system[34]; impliedly,

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23 Ibid.

24 Elisa Morgera and Elsa Tsioumani, 'Yesterday, Today, and Tomorrow: Looking Afresh at the Convention on Biological Diversity' (2010) 21 Yearbook of International Environmental Law 3.

25 Lavanya Rajamani and Jacqueline Peel, *The Oxford Handbook of International Environmental Law* (Oxford University Press, Incorporated 2021) 567 <http://ebookcentral.proquest.com/lib/brunelu/detail.action?docID=6681452> accessed 9 December 2022.

26 David Hunter, James Salzman, and Durwood Zaelke (n 1) 998.

27 Ibid.

28 Stuart R. Harrop and Diana J Pritchard, 'A Hard Instrument Goes Soft: The Implications of the Convention on Biological Diversity's Current Trajectory' (2011) 21 Global Environmental Change 474.

29 Morgera and Tsioumani (n 25) 4.

30 Rajamani and Peel (n 26) 569.

31 Ibid.

32 Philippe Sands and others (n 16) 397.

33 Tuna/Dolphin I, 30 ILM 1594 (1991); Tuna/Dolphin II, 33 ILM (1994); Reformulated Gasoline Case-Report of the Appellate Body, 29 April 1996, WT/DS2/AB/R; Shrimp/Turtle Cases (1998 and 2001); Tuna/Dolphin II (2012)- United States-Measures concerning the Importation, Marketing and Sale of Tuna and Tuna Products, Report of the Appellate Body, WT/DS381/AB/R (16 May 2012)

34 Morgera and Tsioumani (n 25) 4.

difficulties will always arise in adjudicating environmental law disputes arising from the CBD system concerning non-party states such as the US. This was the case in the EC-Biotech Products case[35], where a substantive part of the dispute concerning the interaction of the Cartagena Protocol and the WTO agreements was left unaddressed by the WTO Dispute Resolution Body (DRB) because the US, Canada and Argentina, who were the complainant were not parties to the Protocol.[36]. The CBD has achieved its ecocentric goal not through dispute resolutions, albeit desirable, but mostly through its Conference of Parties (COPs), which has adopted various mechanisms such as the Strategic Plan for Biodiversity 2011-2020 and the Aichi Targets to actualise its objectives.[37] The question of whether the COP's approach to implementing CBD is effective is beyond the scope of this work. However, its effectiveness needs to be researched, especially considering that COPs approaches through the Aichi Targets are more of garnishing the soft law obligations of the CBD rather than concretising them into hard laws.

The CITES, on the other hand, is not only stimulating for taking a bold step in listing species whose conservation is threatened by international trade but also for prohibiting or regulating their international trade as circumstances may demand.[38] Thus, unlike the CBD with a holistic approach, the CITES is species-centred[39]. The CITES regulate trade in species once listed in any of its three Appendices. Appendix-I lists species threatened with extinction that may be further affected by trade.[40] By implication, the species listed in Appendix-I can only be subject to international trade upon issuing import and export permits.[41] With the exceptions of exchange among zoos, scientific exchange, and captive-bred species,[42] there is a complete ban on commercial trade in Appendix-I species.[43] Unlike Appendix-I, Appendix-II regulates the international trade of listed species to ensure they are not over-exploited. As exemplified by the chequered history of the African elephant that was down-listed from Appendix-I to -II following the Southern-Eastern African countries divide and the Global North-Global South conservation-utilization debate[44], most species are listed on Appendix-II where international trade is allowed but only regulated[45]. This questioned the status of CITES as a treaty designed to

35 EC- Measures affecting the approval and marketing of Biotech Products (EC-Biotech Case) WTO Panel , T/DS291/R, WT/DS292/R, WT/DS293 (2006)
36 Philippe Sands and others (n 16) 398.
37 Biosafety Unit, 'COP Decision' <https://www.cbd.int/decision/cop/?id=12268> accessed 10 December 2022.
38 Philippe Sands and others (n 16) 409.
39 Rajamani and Peel (n 26) 560.
40 Article 2(1) CITES
41 Articles 3(2) and 3 of CITES
42 Article 7 CITES
43 Articles 3(2)(d) and 3(3)(c) CITES
44 Charis Thompson (ed), *Co-Producing CITES and the African Elephant* (Routledge 2004) 68.
45 {Citation}

ban the international trade of endangered species[46] and raised concerns about its effectiveness in achieving this aim.[47] Again, the priority of the CITES comes to the fore; trade objectives cum utility of species[48] as canvassed by the Southern African countries[49], environmental protection and sustainability[50] as projected by the Eastern African countries and Global North NGOs[51] or hybridisation? Theoretically, the answer is tilted towards sustainability as canvassed by the Global North; in practice, the answer is utilisation and trade objectives, as exemplified in the overpopulation and down-listing of African elephants in Appendix-II. Except Appendix-I become populated like Appendix-II in the future, the case of the CITES is one where trade has trumped environmental concerns.

Questions have arisen as to which is the best approach: the CBD approach or the CITE approach? There is one common thread that crisscrosses both approaches; they are both fraught with political manipulation of COPs members. While the CBD can be politically manipulated with ease for its soft law nature, the CITES, though with more hardened obligations compared to the CBD is not immune from political manipulations as COPs members politically determine which of the species is to be listed and down-listed as have been witnessed about the African elephant. The primary aim of the CITES is trade; conservation only becomes paramount in cases of endangered species[52]; hence it has been stated that at the time the CITES was negotiated, habitat loss wasn't of international concern.[53] By implication, the CITES favour trade objectives than environmental concerns. On the other hand, the CBD was negotiated when there was a yearning for global habitat protection. Thus, the CBD is more concerned with conservation than trade.[54] The question of which approach is the best will therefore have to be answered in the context. Global North countries that have championed conservation, including animal rights, will easily take sides with the CBD. In contrast, Global South countries pursuing economic development will find solace in the CITES. Until there is a compromise between Global North and South, where a pluralistic approach is agreed on, the future of the conservation-trade relationship may remain troubled.[55]

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46 Annecoos Wiersema, 'CITES and the Whole Chain Approach to Combating Illegal Wildlife Trade' (2017) 20 Journal of International Wildlife Law & Policy 207.

47 Geoffrey Wandesforde-Smith, 'Looking for Law in All the Wrong Places? Dying Elephants, Evolving Treaties, and Empty Threats' (2016) 19 Journal of International Wildlife Law & Policy 365.

48 Michael Bowman, 'A Tale of Two CITES: Divergent Perspectives upon the Effectiveness of the Wildlife Trade Convention: A Tale of Two Cites' (2013) 22 Review of European, Comparative & International Environmental Law 228.

49 Charis Thompson (n 45) 73–75.

50 Bowman (n 49).

51 Charis Thompson (n 45).

52 Wandesforde-Smith (n 48) 368.

53 Bowman (n 49) 233.

54 The CBD is not immune from trade objectives as exemplified in the Nagoya Protocol which has access to genetic resources and fair, equitable sharing of benefits arising from their utilisation as its objectives. Article 1 Nagoya Protocol.

55 Rajamani and Peel (n 26) 572.

2.2 Climate Change Treaties and Trade

The trade-environment relationship under the climate change regime could best be described as an "unequal legal battle"[56]. Illustratively, between 1750 and 2021, Greenhouse Gas (GHG) Emission has been reported to increase from 280 parts per million (ppm) to 418 ppm, with a further projection of 870-1100 ppm by the end of the 21st century if the use of fossil fuel is not nipped in the bud.[57] Either it is as revealed in Billy V. Australia, Urgenda V. Netherland[58], Juliana V. US, Milieudefensie v Shell, Earthlife Africa v. Minister for Environmental Affairs, Delgamuukw v. British Columbia, or Lliuya V. RWE AG,[59] the trade-environment relationship under climate change regime remain a David V. Goliath entanglement because, in pursuance of industrialisation and trade objectives, the G20[60] keep generating GHG Emissions[61] to the detriment of the environmental concerns of the vulnerable states who lack the financial capability for adaptation.[62]

Climate Change negotiations were initiated by the United Nations General Assembly resolution 45/12 and culminated in adopting the 1992 United Nations Framework Convention on Climate Change (UNFCCC), which came into force on 21st March 1994.[63] The UNFCCC is fraught with different perspectives on measures that should be adopted to stabilise GHG emissions.[64] While the developed and middle-income countries prefer a climate change regime that advances their economic objectives, the vulnerable states and developing countries desire environmental protection. Small Island Developing states such as the Maldives and Tuvalu, that are now at risk of losing their island to sea level rise[65], want strict climate obligations as opposed to developed nations such as the US or members of the Organisation of Petroleum Exporting Countries (OPEC) who prefer not to be committed to a specific emission reduction for obvious trade benefits[66]. The trade objectives and environmental protection agitations that bedevilled the UNFCCC negotiation turned out to be more linear than cyclical, as there seems not to be a meeting point between both sides of the divide. However, a compromise was reached[67] to make the UNFCCC a framework convention

56 Antoni Pigrau, "The Texaco-Chevron Case in Ecuador: Law and Justice in the Age of Globalization" (2014) 1(1) RCDA

57 IPCC 2021, 'Climate Change 2021: The Physical Science Basis. Contribution of Working Group I to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change' [2021] Cambridge University Press.

58 Urgenda Foundation V. The Netherlands, Hague Dist Court (2015), Court of Appeal (2018)

59 Lliuya v RWE AG Case No 2 0285/15 Essen Regional Court, on appeal.

60 World's largest economies

61 Alan Boyle and Catherine Redgwell (n 3) 378.

62 L. Rajamani, 'The Increasing Currency and Relevance of Rights-Based Perspectives in the International Negotiations on Climate Change' (2010) 22 Journal of Environmental Law 391, 17.

63 Benoit Mayer, 'The International Law on Climate Change' (Cambridge University Press 2018) 12.

64 Alan Boyle and Catherine Redgwell (n 3) 381.

65 Rajamani (n 63).

66 Alan Boyle and Catherine Redgwell (n 3) 381.

67 Philippe Sands and others (n 16) 299.

that postponed its main emission reduction objectives to the Kyoto protocol.[68] Does this not make the UNFCCC a failed piece of legislation from the onset? Of what importance is a treaty that cannot commit its state members to its objectives? Isn't a dead dog better than one alive yet cannot bite or bark? The UNFCCC could have been akin to this dog safe for its introduction of some principles such as the precautionary principle, common but differentiated responsibility, common concern of humankind, intergenerational equity, and sustainable development.[69]

The Kyoto Protocol was introduced due to the seeming failure of the UNFCCC to solve the global climate crisis. Its approach was to develop stronger commitments to reducing GHG emissions to at least 5 per cent below 1990[70] for developed countries while leaving developing countries with their previous commitment under the UNFCCC. The Kyoto approach sees both developed and developing states complying with their emission reduction commitment in breach. While the US, Canada and Australia paid a deaf ear to the precautionary and common but differentiated responsibilities principles,[71] China and India seized the loophole in the Kyoto Protocol to increase their GHG emission for about two decades.[72] The principles of "common concern of humankind" and intergenerational equity[73] were buried at the altar of trade and economic growth under the Kyoto regime; Abate referred to this as a "shameful reality."[74] The Kyoto regime called for a serious compromise between developed and developing countries if the planet would not be overwhelmed by the global climate crises. With the US's rejection of the Kyoto Protocol in 2001, Canada's withdrawal in 2012, and Japan and Russia's refusal to be committed in its second phase[75], the Paris Agreement became the next port of call.

The main objective of the Paris Agreement is to reduce the risks and impact of climate change by holding the global average temperature below 2^{o}C above pre-industrial levels and limiting it to 1.5^{o}C above the pre-industrial level.[76] The Paris Agreement sought to realise these lofty goals through the instrumentality of the nationally determined contributions ('NDCs'), which do not impose any emission reduction target on states but rather oblige them to self-determined their quota towards emission reduction.[77] Was the Paris Agreement a success or failure? This question becomes pertinent, considering the Paris Agreement's oversimplified approach of shifting the burden of emission reduction to the states through the NDC.[78] While scholars such as Victor[79] and Dimitrov[80] considered it a

[68] Randall S. Abate, 'Climate Change and the Voiceless: Protecting Future Generations, Wildlife and Natural Resources' (Cambridge University Press 2020) 5.
[69] Article 3 UNFCCC.
[70] Artcile 3(1) Kyoto Protocol
[71] Randall S. Abate (n 69) 5–6.
[72] Alan Boyle and Catherine Redgwell (n 3) 385.
[73] Article 3 Kyoto Protocol
[74] Randall S. Abate (n 69).
[75] Alan Boyle and Catherine Redgwell (n 3) 391.
[76] Article 2(1) Paris Agreement.
[77] Article 4(2) Paris Agreement.
[78] Randall S. Abate (n 69) 7.

success for being flexible enough to accommodate all interests, others such as Spash considered it a failure for upholding trade objectives above environmental concerns.[81] Kahl and Weller agree that the Paris Agreement is confronted with a lack of legally binding obligations for employing a flexible approach.[82]

One should agree with Abate, that the entire climate change regime under consideration begs the question rather than answer it, as the emission reduction targets themselves are now otiose considering emerging scientific climate change statistics.[83] Vulnerable states and individual victims are now taking recourse to litigation as a way out. Billy V. Australia, Lliuya v. RWE are a few examples of such concluded and ongoing litigation. Vanuatu, for instance, since 2002,[84] has threatened to invoke the advisory opinion jurisdiction of the International Court of Justice (ICJ) for a climate judicial remedy. This agitation was repeated in 2022 during COP27[85]. All of these reinforce Abate's conclusion that the current climate change regime is a failure because trade objectives have been allowed to trump environmental concerns; hence, the most vulnerable victims, such as Vanuatu, just like Oswald Mtshali's poetic Boy on a swing, are keen on asking the ICJ: "When will I wear long trousers? Why was my father jailed?"

3. PRINCIPLES OF INTERNATIONAL ENVIRONMENTAL LAW

This part discusses principles of international environmental law that underpin the trade-environment relationship. Though not an exhaustive list[86], three of such principles are pinpointed for discussion in this section: sustainable development, precautionary and the common but differentiated responsibility principle, partly for their ubiquitous nature and relevance to the scope of the work.

79 David G. Victor, 'Why Paris Worked: A Different Approach to Climate Diplomacy' [2015] Yale Environment 360.

80 Radoslav S. Dimitrov, 'The Paris Agreement on Climate Change: Behind Closed Doors' (2016) 16 Global Environmental Politics 1.

81 Clive L. Spash, 'This Changes Nothing: The Paris Agreement to Ignore Reality' (2016) 13 Globalizations 928.

82 Kahl and Weller, 'Climate Change Litigation', (Verlag CH Beck oHG, 2021) 215.

83 Randall S. Abate (n 69) 8.

84 Timo Koivurova, 'International Legal Avenues to Address the Plight of Victims of Climate Change: Problems and Prospects' 22 34.

85 Valerie Volcovici, 'From Pacific to Red Sea: Climate Court Action Gathers Wave of Support' *Reuters* (18 November 2022) <https://www.reuters.com/business/cop/pacific-red-sea-climate-court-action-gathers-wave-support-2022-11-18/> accessed 16 December 2022.

86 Other principles within the scope of this work include principles of sovereignty and responsibility, intergenerational equity, the obligation not to cause environmental harm, common concern of humankind, common heritage of humankind, the polluter pay principle, principle of prior informed consent, the preventive principle, and duty to provide prior notification and to consult in good faith.

3.1 Sustainable Development

The principle of sustainable development has manifested its ubiquitous nature in different treaties and tribunal judgments.[87] Though doubtful, it has been stated that it is a principle that has attained the status of customary international law[88]. With an origin formally traced to the adoption of the Rio Declaration in the 1992 United Nations Conference on Environment and Development (UNCED)[89], the principle of sustainable development seems to be neither an environmental chimaera nor a panacea, as it harmonised both environmental and trade variables as yin and yan necessary for the actualisation of a better immediate and future world as encapsulated in the 1987 Brundtland Report.[90] Illustratively, the ICJ, in applying the principle of sustainable development in the Gabcikovo-Nagymaros case, held that the spirit and letter of the principle demand a reconciliation of both economic and environmental variables. In this manner, the ICJ refused to stop the operation of the Gabcikovo plant despite its obvious environmental consequences and only admonished the parties to find a satisfactory solution for releasing the appropriate volume of water into the main river.[91] The WTO Appellate Body decision in the Shrimp/Turtle case was also on four with the ICJ decision, as it held that the principle integrates economic and social development and environmental protection, hence its application per Article XX(g) of the General Agreement on Trade and Tariff (GATT) to uphold the US conservation measures.[92]

Away from the case law, the principle of sustainable development could easily be gleaned in different treaties. From the United Nations Convention on the Law of the Sea (UNCLOS)[93] to GATT, UNFCCC, CBD, and Nagoya Protocol, the principle of sustainable development make a bold statement on balancing trade and environmental concerns. This makes it apt to consider whether the principle has formally recognised the normative right to development. Again, the answer to this question throws a spanner into whatever harmonised answer the courts and tribunals have been trying to build with the principle of sustainable development. Not surprisingly, the US dissociated itself from any interpretation that could mean that the right to development has been given flesh and blood through the principle of sustainable development while Global South countries, especially African countries, already with a right to development in their normative regional statutes, fight back by ensuring that environmental objectives do not override their developmental goals in international

87 Philippe Sands and others (n 16) 218.
88 Sands, P., 'International Courts and the Application of the Concept of "Sustainable Development"' [1999] 3 Yearbook of UN Law 389.
89 Principle 27 Rio Declaration.
90 UN Secretary-General and World Commission on Environment and Development, 'Report of the World Commission on Environment and Development ': [1987] The Brundtland Report <https://digitallibrary.un.org/record/139811> accessed 17 December 2022.
91 ICJ Reports (1997) 78, para. 140
92 38 ILM 121 (1999), para 129.
93 Preamble and Article 61(3), 62(1), 119(1)(a) and 150(b) of the UNCLOS

negotiations.[94] The question that remained to be answered is how the US, a beneficiary of the normative interpretation of the principle of sustainable development in the Shrimp/Turtle case, suddenly changed the goalpost to argue that the principle is just a goal and does not amount to a right. Accepting the principle of sustainable development as a right to development by the US would have settled the Global North-South development and conservation debate under a harmonised system that balances both variables. Thus as stated by Abate, the principle of sustainable development may be another "greenwashing" adopted by industrialised nations to achieve their capitalist selfish goal ostensibly.[95]

3.2 Precautionary and Common But Differentiated Responsibilities

The precautionary principle concern itself with anticipatory measures that need to be taken to avoid environmental harm where there is scientific uncertainty.[96] The principle has received massive support from vulnerable victims of environmental damage, such as the Alliance of Small Island States (AOSIS).[97] It has, however, been criticised for having a vague and unclear meaning with the potential to interfere with trade unjustly[98], just as it has been seen to be in opposition to the cost-benefit analysis of environmental measures.[99] Its traducers, mainly from the Global North, has refused to apply it as a climate solution mechanism on the ground that it has no bases in international law following the Corfu Chanel case[100], where there was a known risk to other states.[101] Regardless of the controversy surrounding the precautionary principle, it has gain recognisance in different environmental treaties such the CBD, UNFCCC, Cartegena Protocol, Agenda 21, among others. The ICJ in the Pulp Mills case made recourse to the precautionary principle as an interpretative aid, albeit limitedly.[102] The WTO DSS has also had the opportunity to apply the precautionary principle in the Hormones and Biotech Product cases. In both instances, it refused to decide whether it is a principle of international law. Considering the controversy surrounding the principle, it will not be difficult to agree with Hunter et al., that the use of environmental insurance or bonds will be effective in implementing the precautionary principle.[103]

The principle of Common but Differentiated Responsibility (CBDR), as captured in Principle 7 of the Rio Declaration, is fallout of the general principle of equity in international law which, in the case of international environmental law recognises the significance of mainstreaming Global

94 Philippe Sands and others (n 16) 229.
95 Randall S. Abate (n 69) 9.
96 Principle 15 of the Rio Declaration.
97 Philippe Sands and others (n 16) 230.
98 Philippe Sands and others (n 16).
99 Mark Geistfeld, 'Implementing the Precautionary Principle' [2001] 31 Environmental Law Reporter 11326-11327.
100 ICJ Reports (1949) 18-22
101 Alan Boyle and Catherine Redgwell (n 3) 170.
102 Rajamani and Peel (n 26) 314.
103 David Hunter, James Salzman, and Durwood Zaelke (n 1) 465.

South interests into the application of international environmental law by Global North countries.[104] Its application in international environmental law has been justified by the Aristotelian postulation of treating dissimilar cases with different barometers[105] where different strokes apply to different folks. Apart from its integration into treaty law such as the UNFCCC, Kyoto Protocol[106] and Paris Agreement through the NDCs[107], it has also been called in aid for judicial interpretation by the WTO in the Shrimp/Turtle dispute[108]. CBDR has been criticised for being another expression of the right to development that exacerbates the climate change crises.[109] Thus, while India and China remain beneficiaries of the CBRD, it has not been of any benefit to other developing countries[110]. India and China have refused to lower their GHG emission because the US has not done the same by applying the CBRD. The question that should be asked is whether one wrong could justify another. Suppose countries of the Global North keep emitting GHG emissions to the detriment of Global South countries. What benefit is it for the Global South countries such as India and China to intensify GHG emissions? Until the CBRD become internally applicable between advanced developing countries and non-advanced developing countries in the Global South, it may be unconscionable for the Global South to keep blaming the Global North for global climate crises.

4. UNILATERAL TRADE MEASURES

Though environmental protection is not one of the main objectives of the WTO, it should be noted that the WTO system cannot operate without considering environmental interests[111]. Thus, the emergence of the WTO itself was followed by creating a Committee on Trade and the Environment (CTE),[112] just as the Marrakesh Agreement referred to environmental objects in its preamble. The practice has seen states adopting trade-related measures in pursuing environmental interests. This part explores trade measures such as unilateral trade measures and the environmental exceptions in GATT Article XX.

Owing to the concept of state sovereignty, states often frown at unilateral trade restrictions by other states. They do not hesitate to invoke legal processes against such unilateral trade measures. The Swordfish case,

[104] Anne Gallaghert, 'The "New" Montreal Protocol and the Future of International Law for Protection of the Global Environment' (1992) 14 Houston Journal of Law 267.
[105] Rajamani and Peel (n 26) 321.
[106] Article 3 UNFCCC and Kyoto Protocol.
[107] Lavanya Rajamani, 'Ambition and Differentiation in the 2015 Paris Agreement: Interpretative Possibilities and Underlying Politics.' (2016) 65(2) International & Comparative Law Quarterly 493.
[108] US-Import Prohibition of Certain Shrimp and Shrimp Products -15 June 2002/WTO Doc WT/DS58/RW
[109] Randall S. Abate (n 69) 10.
[110] Marie Blévin, 'The Clean Development mechanism and the Poverty Issue' (2011) 41 Environmental Law 777.
[111] Harro Van Asset (n 4) 756.
[112] WTO, 'Decision on Trade and Environment' (15 April 19940 LT/UR/D-6/2

where the EU, for instance, not only commenced WTO proceedings against Chile for its restriction of Spanish fishing vessels from accessing its ports but also counterclaimed the UNCLOS proceedings commenced by Chile on the conflict over distant water fishing nations and coastal states and eventually settled the dispute through UNCLOS negotiation mechanism illustrate the extend states could go in kicking against unilateral trade restrictions.[113] Similar reactions of this nature were also recorded in the EU-Faroe Islands Herring Stock Dispute at the WTO.[114] One could continue in this manner and refer to other cases such as the US Gasoline Standards case, the Sea Product case, the Shrimp-Turtle Case and even the locus classicus dispute of Tuna/Dolphin, all of which shall be discussed fully in the next section and were provoked as a result of attempts to unilaterally restrict trade by one state which was considered by the other state as overreaching and extraterritorial.

While the GATT panel's decision in the Tuna/Dolphin case seems stringent and non-accommodative of states' obligation to protect the environment and its citizens' public health, it has been argued by some scholars that the case creates room for product-related processes and production method as against non-product related product and processes.[115] However, WTO jurisprudence has since made progress, thus rendering the Tuna/Dolphin case a bad law.[116] Relying heavily on Article XX of GATT and considering the chapeau, which further limits the exceptions created therein, WTO Appellate Body has aligned itself with state unilateral trade restrictions, provided it could be justified under the exceptions and chapeau in Article XX. This was the attitude of the Appellate Body in the US Gasoline Standards and Shrimp-Turtle cases where respect for the Chapeau, good faith, and international environmental agreement was emphasised, respectively.[117] Unlike the GATT panel in the Tuna/Dolphin case that neglected or declined to accommodate environmental concerns, WTO jurisprudence, especially through the Shrimp-Turtle case, now accommodates environmental variables through the exceptions enshrined in Article XX of GATT.[118]

5. WTO JURISPRUDENCE

Though the current climate change regime, as reflected in the treaties discussed in part two of this work, is yet to be the subject of a direct dispute before the WTO DRS[119], renewable energy cases decided by the WTO DRS

[113] Marcos A. Orellana, 'The Swordfish Dispute Between the EU and Chile at the ITLOS and the WTO' (2002) 71 Nordic J Int'l L 55.
[114] Yoshimichi Ishikawa, 'The EU-Faroe Islands Herring Stock Dispute at the WTO: The Environmental Justification.' [2014] ASIL.
[115] Thomas Schoenbaum, 'Free International Trade and the Environment: Irreconcilable Conflict?' (1992) 86/40 American Journal of International Law 700,722.
[116] Ibid 762.
[117] Alan Boyle and Catherine Redgwell (n 3) 779–780.
[118] This allowance is not also without limitation as have been shown through the Biotech dispute.
[119] Harro Van Asset (n 4) 765.

will suffice in deducing the attitude of the WTO system towards future climate change disputes. The first such dispute is the case of the measures affecting the renewable energy generation sector and Canada, where the WTO Appellate Body held that renewable energy support measures by the Canadian government of Ontario province were a contravention of multilateral trade rules.[120] The second such case is India v US,[121] where renewable energy support measures were also struck down by the WTO DRS. Though India later successfully challenged the US support measures[122], it should be noted that these rulings rejecting renewable energy measures were given with the invocation of the non-discriminatory principle of the WTO system against the use of local content requirements. This again reinforced the finding in part two of this work that trade objectives reign supreme for the climate change regime.

As noted earlier, the Tuna/Dolphin cases decided by the defunct GATT panels are now otiose, especially the part of the findings against the unilateral trade restriction pursuant to Article XX of GATT. Thus, in the Reformulated Gasoline Case,[123] the WTO Appellate body overruling the panel considered the US Gasoline measures that unilaterally interfered with Brazil and Venezuela's trade interest as sufficient fulfilment of the requirement in Article XX(g) of GATT, thus paving the way for new reasoning that mainstream environmental concerns into trade measures using WTO laws; a departure from the tuna/Dolphin cases.

The facts and issues raised in the Shrimp/Turtle[124] cases are similar to those of the Tuna/Dolphin case. Here, the US applied its domestic conservation laws extraterritorially to activities carried out within the jurisdiction of India, Malaysia, Pakistan and Thailand and justified this unilateral trade restriction on the exceptions created in Article XX of GATT. The principle of sustainable development discussed in part three of this work was invoked by the Appellate Body in justifying the US unilateral measures pursuant to Article XX of GATT while also holding that the US measures were unjustifiably discriminatory under the chapeau to Article XX. The Shrimp/Turtle case is innovative for applying the principle of sustainable development and balancing the trade-environmental variables.

In the Asbestos case,[125] where Canada requested the WTO DRB to consider the legality of a French decree with the WTO Agreement, the Appellate Body rejected Canada's three grounds of challenge to the Panel's

[120] Canada-Certain Measures Affecting the Renewable Energy Generation Sector and Canada – Measures Relating to the Feed-In Tariff Program (Appellate Body Report) (6 May 2013) WTO Docs WT/DS412/AB/R

[121] India- Certain Measures Relating to Solar Cells and Solar Modules (Appellate Body Report) (16 September 2016) WTO Doc WT/DS456/AB/R

[122] United States-Certain Measures Relating to the Renewable Energy Sector (Panel Report) (27 June 2019) WTO Doc WT/DS510/R

[123] United States-Standards for Reformulated and Conventional Gasoline, Report of the Panel, 29 January 1996, WT/DS2/R

[124] AB-1998-4, 12October 1998, 33 ILM 188 (1999)

[125] European Communities-Measures Affecting Asbestoes and Asbestoes-Containing Products, Report of the Appellate Body, WT/DS135/AB/R, 12 March 2001 (Asbestos, Appellate Body Report)

ruling. It held, among others, that France's health protection measures purportedly restricting Canada's trade objectives were necessary under Article XX(b) of GATT. On the other hand, in the Brazil Retreaded Tyres Case[126], the Appellate Body found that the Brazilian ban on the EU's importation of re-treaded tyres did not satisfy the dictates of Article XX chapeau.

6. CONCLUDING REMARKS

The main finding of this work is that while considerable efforts have been made to mainstream environmental protection into trade objectives through the WTO jurisprudence, there remain some forms of market failures, making the trade-environment relationship lopsided, with inadequate attention given to the environment, which brings to fore the need to revisit David Hunter's metaphoric invisible elbow destroying the common goods created by an invisible hand[127]. It is concluded that until there is a compromise between Global North and South, habitat and ecocentric-based approaches, conservationists and non-conservationists, where a pluralistic approach is agreed on, the future of the trade-environment relationship may remain troubled and uncertain.[128]

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[126] Brazil-Measures Affecting Imports of Reetreaded Tyres,
[127] David Hunter, James Salzman, and Durwood Zaelke (n 1).
[128] Rajamani and Peel (n 23) 572.

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Author's Contributions (in accordance with ICMJE criteria for authorship)
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The author(s) solemnly declare(s) that this research has not involved any human subject (body or organs) for experimentation. It was not a clinical research. The contexts of human population/participation were only indirectly covered through literature review. Therefore, an Ethical Clearance (from a Committee or Authority) or ethical obligation of Helsinki Declaration does not apply in cases of this study or written work.

Research involving animals (ARRIVE Checklist)
The author(s) solemnly declare(s) that this research has not involved any animal subject (body or organs) for experimentation. The research was not based on laboratory experiment involving any kind animal. The contexts of animals not even indirectly covered through literature review. Therefore, an Ethical Clearance (from a Committee or Authority) or ethical obligation of ARRIVE does not apply in cases of this study or written work.

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